

**Notice of Allowability**

Application No.

10/726,226

Applicant(s)

MEHRING, CARSTEN

Examiner

Hung Q Dang

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's response received on 10/1/2004.
2. ☒ The allowed claim(s) is/are 33-48.
3. ☒ The drawings filed on 02 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 4/02/04;3/31/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### DETAILED ACTION

1. This communication is in response to applicant's response received on 10/1/2004. The filed terminal disclaimer has been entered.

#### ***Allowable Subject Matter***

2. Claims 33-48 are allowed.

The following is an examiner's statement of reasons for allowance:

**Regarding claim 33**, the prior arts of record fail to teach or disclose a finger mounted data entry device for a user to enter information into a computing device, the data entry device mounted on at least one of a user's hands, each of the at least one of the user's hands having a plurality of fingers and one thumb, and a palm-side and a back-side, the data entry device being adapted to accept data entry in a manner mimicking a keyboard that generates a signal representing a character corresponding to a key selected from a plurality of keys arranged in a plurality of rows on the keyboard, as claimed in claim 33. Said device further comprises two sets of thumbs contacts positioned on respective ones of the user's thumbs on each of the at least one of the user's hands, each set of thumbs contacts including a plurality of thumb contact wherein each respective one of the thumb contacts corresponds to a respective one of the plurality of rows on the keyboard; and a plurality of finger contacts positioned on respective ones of the user's fingers on each of the at least one of the user's hands such that contact between any one of the finger contacts and a respective one of the thumb contacts generates a signal equivalent to the signal that would be generated if

touch typing was used by the user to press a corresponding key in the corresponding row of keys on the keyboard.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Vance et al. U.S. Patent 6,304,840 teaches a fingerless glove for interacting with data processing system, which is used for enabling ten-finger-typing with a virtual keyboard. The angle at which the user's; finger bends at the proximal interphalangeal joint is used to decode a particular row of the keyboard. Each finger controls one or more columns. Discrimination between columns operated by the same fingering is achieved through an abduction/adduction sensor.

However, said virtual keyboard disclosed by Vance et al. does not teach or suggest two sets of thumbs contacts positioned on respective ones of the user's thumbs on each of the at least one of the user's hands, each set of thumbs contacts including a plurality of thumb contact wherein each respective one of the thumb contacts corresponds to a respective one of the plurality of rows on the keyboard; and a plurality

of finger contacts positioned on respective ones of the user's fingers on each of the at least one of the user's hands such that contact between any one of the finger contacts and a respective one of the thumb contacts generates a signal equivalent to the signal that would be generated if touch typing was used by the user to press a corresponding key in the corresponding row of keys on the keyboard.

b) McDowall et al. U.S. Patent 6,128,004 teaches a data input glove, which comprises finger contacts for entering data into a processing system when said contacts are in contact. However, the data input glove disclosed by McDowall et al. does not teach or suggest two sets of thumbs contacts positioned on respective ones of the user's thumbs on each of the at least one of the user's hands, each set of thumbs contacts including a plurality of thumb contact wherein each respective one of the thumb contacts corresponds to a respective one of the plurality of rows on the keyboard; and a plurality of finger contacts positioned on respective ones of the user's fingers on each of the at least one of the user's hands such that contact between any one of the finger contacts and a respective one of the thumb contacts generates a signal equivalent to the signal that would be generated if touch typing was used by the user to press a corresponding key in the corresponding row of keys on the keyboard.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HD

MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

